

AMENDMENTS TO THE CLAIMS

1.(currently amended): A fluidized-bed reactor for oxychlorination of ethylene, oxygen and HCl, ~~said reactor~~ with a heat exchange apparatus, said heat exchange apparatus comprising:

a heat exchanger, including a plurality of tube packets, in a fluidized bed for releasing heat evolved from an exothermic reaction of the oxychlorination to a heat-transfer medium in the tube packets, to water/steam; and

a ring pipe coupled to said heat exchanger, wherein

the tube packets ~~come into contact~~ are fed with the water distributed via the ring pipe and the steam removed via the ring pipe, wherein the ring pipe is mounted as a distribution or collection chamber on a wall of the reactor, wherein

the distribution or collection chamber is designed to be essentially circular in cross section and placed on the reactor wall both inside and outside with essentially one-half assigned to the interior and one-half assigned to the exterior.

2. (currently amended): A ~~fluidized bed reactor as claimed in claim 1, wherein the distribution or collecting chamber is mounted internally on the reactor wall~~ heat exchange apparatus for releasing heat evolved from an exothermic reaction in a fluidized-bed reactor for oxychlorination of ethylene, oxygen and HCl, comprising:

a plurality of tube packets in a fluidized bed within said fluidized-bed reactor, said plurality of tube packets pressurized with a heat-transfer medium; and

a ring pipe coupled to said tube packets including an internal opening there-between for defining a desired pressure loss and hence for ensuring uniform flows over the tube packets, wherein

the tube packets are pressurized with the heat-transfer medium distributed via the ring pipe and gas removed via the ring pipe, wherein the ring pipe is mounted as a distribution or collection chamber on a wall of the reactor, wherein

the distribution or collection chamber is designed to be essentially circular in cross section and placed on the reactor wall both inside and outside with essentially one-half assigned to the interior and one-half assigned to the exterior.

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3-7. (cancelled)

8. (currently amended): The ~~fluidized bed reactor~~ heat exchange apparatus as claimed in claim 1, ~~further comprising holes connecting the pipes said holes~~ wherein the coupling between said ring pipe and said heat exchanger includes an internal opening there-between, said opening for defining a desired pressure loss and hence for ensuring uniform flows over the tube packets.

9. (currently amended): A ~~process~~ method of providing heat exchange in a fluidized bed reactor for the oxychlorination of ethylene, oxygen and HCl, said ~~reactor providing method~~ comprising the steps of:

providing a fluidized bed reactor;

providing a heat exchanger, including a plurality of tube packets, in the fluidized bed for releasing heat evolved from an exothermic reaction of the oxychlorination to a heat-transfer medium in the tube packets, to water/steam;

coupling a ring pipe to said heat exchanger; and

pressurizing ~~causing~~ the tube packets ~~to come into contact~~ with the water distributed via a the ring pipe and releasing steam via the ring pipe, wherein the ring pipe is mounted as a collection or distribution chamber on a wall of the reactor, wherein

the distribution or collection chamber is designed to be essentially circular in cross section and placed on the reactor wall both inside and outside with essentially one-half assigned to the interior and one-half assigned to the exterior.

10-15. (cancelled)

16. (currently amended): The ~~process~~ method as claimed in claim 9, further providing ~~holes for connecting the pipelines said holes being~~ an internal opening in the coupling between said ring pipe and said heat exchanger in the form of throttle holes for defining a desired pressure loss and hence for ensuring uniform flows over the various tube packets.
